

BBF/ELF/ESF-V-HE

BALL VALVE FOR VENTING AND
DRAINING WITH FLANGE
AND WELDING END

DN 25-100 | PN 25

FULL BORE

INFORMATION

**Ball valve for venting and draining
with flange and welding end**

/// Operating temperature up to +150 °C

/// Flanges drilled and dimensioned according
to EN 1092 - pressure rating PN25

MATERIALS

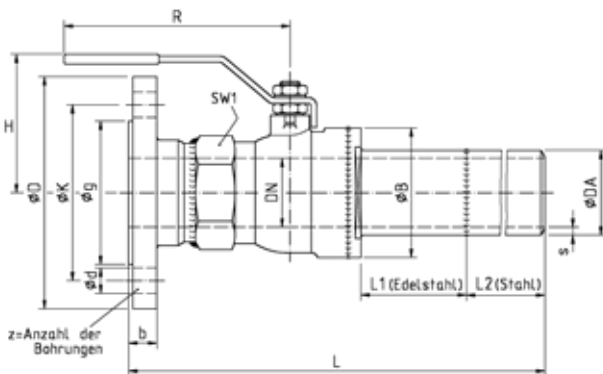
Body	Stainless steel 1.4581
Weld end	Steel
Flanges	Steel
Ball	Stainless steel
Ball Seals	PTFE
Stem Seals	EPDM

OPTIONS

- /// Suitable for steam
- /// Further options for this ball valve according to
the list on the „Options“ supplementary sheet
- /// For deviating operating conditions please
send us a written request stating the fluids, as
well as the pressure and temperature range.



For simplified assembly of the
flange connection in confined
conditions in road caps, we offer
we offer counter lugs as
an accessory. One counter
lug replaces 2 nuts so that
there is no need to hold the
nuts underneath the flange
connection.



DN [mm]	PN [bar]	DA [mm]	s [mm]	L [mm]	L1 [mm]	L2 [mm]	D [mm]	B [mm]	H [mm]	R [mm]	SW1 [mm]	Weight [kg]	Article-No.
25	25	33.7	3.2	895	200	579	115	49	65	132	41	4.2	050.0004
32	25	42.4	3.2	1000	63	774	140	65	84	146	50	6.5	050.8241
40	25	48.3	3.2	963	50	771	150	75	85	146	55	8.5	050.0119
50	25	60.3	4.0	911	120	546	165	92	95	146	70	10.5	050.0120
80 ¹	25	88.9	4.0	1000	250	486	200	140	155	300	---	18.0	050.0198

¹Diese Ausführung besteht abweichend aus dem Gehäusewerkstoff 1.4571.



COUNTERFLAP

FOR SIMPLIFIED ASSEMBLY
OF FLANGE CONNECTIONS

DN 50-80 | PN 10 - 40

INFORMATION

Counter lugs for flange connections in directly buried drain and vent ball valves.

/// For simplified assembly of flange connections in directly buried pipeline construction, the counter lugs provide assistance for the assembly personnel.

/// The use of the counter lugs eliminates the need for counter-holding when bolting the flange connection, which is difficult due to limited space.

/// The counter brackets replace the need to hold the flange in place with tools by mutually securing 2 bolted connections.

DN [mm]	Pressure ratings				Quantity per Flange connection	Article-No.
	PN 10	PN 16	PN 25	PN 40		
50	X	X	X	X	2	050.9500
80	X	X	X	X	4	050.9501

MATERIAL

Stainless steel 1.4301

OPTIONS

	Underground Ball valves HE					Standard Ball valvesHS						
	KSF V KSF R	ELF/ESF V	EMG/ESF V	KSF V KSF R Tie-in ball valve	KSF V (Hot tapping ball valve)	KSF V KSF R	FSK V FSK R	FSL V	FSL/KSF V + FSK/KSF V FSL/KSF R + FSK/KSF R	KSG/KSF V	KSG V	KSF V (Hot tapping ball valve)
Variable lengths for underground installation ¹	✓											
Special lengths		✓	✓			✓		✓	✓	✓		
Variable stem extensions for underground installation ²	✓											
Stem extension 60 mm /100 mm						✓	✓	✓	✓	✓	✓	✓
Spigot for drain and vent ball valve	✓											
Test connection from DN150 (with plug or ball valve)						✓	✓	✓				
greater wall thicknesses for extreme axial loads or corrosion surcharges	✓											
With Flange/Weld end from DN125					✓							
Suitable for steam	✓			✓	✓	✓	✓	✓			✓	

¹Variable overall lengths for installation in the ground:

The overall lengths specified in the catalog correspond to the standard dimensions. Other overall lengths are available on request as special production.

²Variable spindle extensions for buried installation:

The dome height of 350 mm shown in the catalog corresponds to the standard. In addition, dome heights of 500 mm, 750 mm and 1000 mm can be manufactured on request.

Tender specification texts are available for download on our website.

TECHNICAL INFORMATION

Wall thicknesses for ball valves for underground installation

The pipe ends used for BÖHMER inground district heating ball valves comply with the requirements of AD-Merkblatt B9 for the necking of pipes. Necking for drain and vent lines can be carried out on these pipes without falling below the minimum

wall thickness requirements of EN488. The following wall thicknesses refer to the pipe material used. These are machined at the weld preparation by wall thickness adjustment.

DN	20	25	32	40	50
Pipe dimensions	26,9 x 3,2	33,7 x 3,2	42,4 x 3,2	48,3 x 3,6	60,3 x 3,6
DN	65	80	100	125	150
Pipe dimensions	76,1 x 4,0	88,9 x 4,5	114,3 x 4,5	139,7 x 4,5	168,3 x 5,0
DN	200	250	300	350	400
Pipe dimensions	219,1 x 6,3	273,0 x 7,1	323,9 x 8,0	355,6 x 8,0	406,4 x 8,8

Flange dimensions

For all ball valves the standard for flange connections EN1092 is complied with. Below you will find an overview of the flange connection dimensions for pressure ratings PN10 - PN40, which

were not listed in the data sheets for reasons of clarity. The flange sheet thicknesses may deviate upwards from the dimensions required in the standard for manufacturing reasons.

DN	PN10	PN16	PN25	PN40	D	g	K	b	z	d
10	X	X	X	X	90	40	60	16	4	14
15	X	X	X	X	95	45	65	16	4	14
20	X	X	X	X	105	58	75	18	4	14
25	X	X	X	X	115	68	85	18	4	14
32	X	X	X	X	140	78	100	18	4	18
40	X	X	X	X	150	88	110	18	4	18
50	X	X	X	X	165	102	125	20	4	18
65	X	X			185	122	145	22	4	18
65			X	X	185	122	145	22	8	18
80	X	X	X	X	200	138	160	24	8	18
100	X	X			220	158	180	20	8	18
100			X	X	235	162	190	24	8	22
125	X	X			250	188	210	22	8	18
125			X	X	270	188	220	26	8	26
150	X	X			285	212	240	22	8	22
150			X	X	300	218	250	28	8	26
200	X				340	268	295	24	8	22
200		X			340	268	295	24	12	22
200			X		360	278	310	30	12	26
200				X	375	285	320	34	12	30
250	X				395	320	350	26	12	22
250		X			405	320	355	26	12	26
250			X		425	335	370	32	12	30
250				X	450	345	385	38	12	33
300	X				445	370	400	26	12	22
300		X			460	378	410	28	12	26
300			X		485	395	430	34	16	30
300				X	515	410	450	42	16	33
350	X				505	430	460	26	16	22
350		X			520	438	470	30	16	26
350			X		555	450	490	38	16	33
350				X	580	465	510	46	16	36
400	X				565	482	515	26	16	26
400		X			580	490	525	32	16	30
400			X		620	505	550	40	16	36
400				X	660	535	585	50	16	39